



Drysdale, M., Williams, A., & Meaney, G. (2007). Teachers' perceptions of integrating students with behaviour disorders: Challenges and strategies. *Exceptionality Education Canada*, 17(3), 35-60. <http://ir.lib.uwo.ca/eei/vol17/iss3/3/>

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5-1-2007

Teachers' Perceptions of Integrating Students with Behaviour Disorders: Challenges and Strategies

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Abstract

This study is a preliminary exploratory investigation into teachers' perceptions of both the challenges involved in integrating children with behavioural problems and potential strategies that may be used to deal with those problems. There were two separate but related phases: Phase One was the creation of the Teachers' Perceptions of Successful Integration (TPSI) survey; Phase Two was an initial test of the survey on 53 teachers. Based on Phase Two, results indicate that uncontrollable, dangerous behaviour and time demands placed on the teacher were the most challenging aspects of integrating this student group. Successful strategies included creating structured classrooms with positive atmospheres, having expectations that are known to the child, actively involving the child in the intervention program, establishing relationships of trust between students and teachers, and providing adequate teacher training in the area of behaviour disorders. Identified

Recommended Citation

Drysdale, M. T., Williams, A., & Meaney, G. J. (2007) Teachers' Perceptions of Integrating Students with Behaviour Disorders: Challenges and Strategies. *Exceptionality Education International*, 17, 35-60. Retrieved from <http://ir.lib.uwo.ca/eei/vol17/iss3/3>

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ISSN 1918-5227

Pages 35- 60

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This study is a preliminary exploratory investigation into teachers' perceptions of both the challenges involved in integrating children with behavioural problems and potential strategies that may be used to deal with those problems. There were two separate but related phases: Phase One was the creation of the Teachers' Perceptions of Successful Integration (TPSI) survey; Phase Two was an initial test of the survey on 53 teachers. Based on Phase Two, results indicate that uncontrollable, dangerous behaviour and time demands placed on the teacher were the most challenging aspects of integrating this student group. Successful strategies included creating structured classrooms with positive atmospheres, having expectations that are known to the child, actively involving the child in the intervention program, establishing relationships of trust between students and teachers, and providing adequate teacher training in the area of behaviour disorders. Identified unsuccessful strategies were yelling at the child and expulsion. Educational implications of the study are discussed.

Regular classroom teachers are increasingly responsible for the education of students with a variety of special needs, including students with behavioural disorders (e.g., Bradshaw, 2001; Esperat, Moss, Roberts, Kerr, & Green, 1999; Kavale, 2002). These teachers will typically find themselves in one of three situations: (a) the *mainstreamed* classroom, in which special needs students are educated in the regular classroom, but may be “pulled out” to attend special education classes (Bennett, Dworet, & Daigle, 2001; Marschark, Young, & Lukomski, 2002; Rosenberg, Wilson, Maheady, & Sindelar, 1997); (b) the *inclusive* classroom, in which special needs students are educated exclusively in the regular classroom, and teachers have access to additional resources (such as teacher’s assistants) to manage special needs (Coots, Bishop, & Grenot-Scheyer, 1998; Marschark et al., 2002; Praisner, 2003; Wilson, 1999); or (c) the *integrated* classroom, in which special needs children are educated in the regular classroom, but the teacher is *not* provided with additional resources to manage special needs (Avramidis & Norwich, 2002; Marschark et al., 2002). While the fully inclusive classroom may be an ideal situation (Kavale, 2002; Praisner, 2003), the reality for many teachers may well be a policy of integration (e.g., Steele, 2007).

Successful integration of students with special needs requires that teachers hold positive attitudes toward both special needs students and a policy of integration (e.g., Dyson & Zhang, 2004; Jordan & Stanovich, 2004). While several studies (e.g., Esperat et al., 1999; Opdal, Wormnæs, & Habayeb, 2001; Pearman, Barnhart, Huang, & Mellblom, 1992; Soodak, Podell, & Lehman, 1998) address teachers’ perceptions of integrating students with special needs, they tend to classify all students with exceptionalities as a homogenous group and, therefore, fail to provide for distinctions that may exist between sub-groups of exceptional students. However, a review of relevant literature by Avramidis and Norwich (2002) suggests that teachers’ attitudes toward integration are strongly influenced by, among other factors, type and severity of exceptional characteristics of the students. In particular, teachers appeared most negative towards students with emotional and behavioural problems, especially if those problems were severe.

Avramidis and Norwich (2002) found teacher characteristics were of little use in predicting attitudes toward integration of special needs students. Rather, characteristics of the students and perceptions of available resources and support were related with teachers’ perceptions of the usefulness of integration. We suggest from this research that the two factors may interact. That is, students with severe behavioural or emotional problems require more instructional and managerial resources than do students with more physical or sensory problems. For example, Avramidis and Norwich found that teachers

were more likely to have positive attitudes toward integration of students with mild-to-moderate physical or sensory problems (also see Clough & Lindsay, 1991; Soodak et al., 1998). When confronted with extreme behavioural disorders, teachers may experience a process of initial hostility toward integration (because they perceive the problems as severe and demanding) fuelled by a lack of resources within the school system to provide adequate strategies for dealing with behavioural problems (Avramadis & Norwich, 2002).

This hypothesis is reinforced by Soodak et al. (1998), who found that higher teacher efficacy was related with more positive attitudes toward integration, and that teachers became more hostile toward integration with experience. So, teachers who could more effectively deal with behavioural problems were more likely to hold positive attitudes toward integration, but, perhaps, the general lack of available strategies and resources influenced teachers in general to hold increasingly negative attitudes toward integration. Similar results were found by Weisel and Dror (2006), whose study of Israeli teachers' attitudes found teacher efficacy and school climate to influence attitudes toward integration. Once again, it appears that teachers with more effective strategies, and more support from the school system for dealing with behavioural problems, hold more positive attitudes toward integration. Winter (2006) found that Northern Irish teachers felt they were poorly prepared to deal with integration, and Kavale (2002) found that U.S. schools do not yet have the appropriate accommodations to allow for effective inclusive education. The prevalence of such findings have led several authors in numerous countries (e.g., Angelides, Stylianou, & Gibbs, 2006, and Koutrouba, Vamvakari, & Steliou, 2006, in Cyprus; Bradshaw, 2001, in Australia; Kavale, 2002, in the United States; Moberg, 2003, in Finland; and Winter, 2006, in Ireland) to suggest that integration policies should focus on the development of positive attitudes in teachers and teacher training that involves the dissemination of specific strategies for dealing with specific problems, such as behavioural disorders.

Teachers' attitudes toward integration are important not only because positive attitudes can provide the motivation for pursuing successful strategies, but also because teachers' attitudes can affect students' attitudes. For example, students will tend to hold negative attitudes toward integration if teachers do (Roberts & Lindsell, 1997); alternatively, if teachers have positive attitudes toward integration, students are more likely to see integration as positive and helpful (Pearman et al., 1992). That is, teachers are likely to influence students through their interpretation of institutional values and expectations (e.g., Dodge et al., 2003; Soodak et al., 1998). However, instilling positive attitudes in teachers may not, in itself, be effective in promoting integration, unless the teachers are also equipped with the appropriate behavioural skills to

deal with students who have behavioural disorders (see Bandura, 1997; Fishbein & Ajzen, 1975; Fisher & Fisher, 2002). Therefore, attempts at creating an environment conducive to the integration of children with behavioural disorders should focus on the specific challenges faced by teachers and the specific *strategies* teachers can use to overcome those challenges.

Existing research provides some information about the challenges faced by teachers when dealing with problematic behaviours. These challenges can be roughly placed in three categories: (a) general behavioural issues, (b) educational issues, and (c) social issues. General behavioural issues include uncontrollable disruptive behaviour in the classroom and acting out (Rosenberg et al., 1997), talking back to the teacher (Ogden, 2001), and rule-breaking behaviour (including, but not limited to, delinquency, disorderly conduct, substance abuse, and possession of weapons; Connor, 1994, Rosenberg et al., 1997). Educational issues include difficulty maintaining student interest (Coleman, 1996), inability to follow directions, and distractibility (Bullock, Zagar, Donahue, & Pelton, 1985). Social issues include displays of anti-social behaviour towards other students such as bullying, intimidating or threatening others (Coleman, 1996), fighting, and arguing (Ogden, 2001).

Similarly, the existing research suggests a number of strategies teachers may use to deal with the challenges posed by students with behavioural disorders. These strategies include flexible learning, peer support/tutoring, activity-based learning, facilitating friendships, modifying the curriculum and teacher expectations, using teacher's aids (educational assistants; Soto, Müller, Hunt, & Goetz, 2001), cooperative learning groups, and cooperative teaching strategies (Bauwens, Hourcade, & Friend, 1989; Block & Zeman, 1996; Pearman et al., 1992; Soodak et al., 1998; Wilson, 1999). Strategies for integrating students with behavioural disorders can be roughly divided into ten categories: (a) segregated classrooms, (b) teacher training, (c) classroom structure, (d) interpersonal skills training, (e) teaching techniques, (f) parental involvement, (g) reward systems, (h) student involvement, (i) punishment, and (j) therapeutic interventions such as drug therapy (Astor, 1998; Bauwens et al., 1989; Coleman, 1996; Kavale, Forness, & Bender, 1998; Rosenberg et al., 1997; Wilson, 1999). A more complete description of known challenges and strategies is available from Williams (2003).

In practice, teachers may use a wide variety of these strategies. Some are well-researched and known to be effective, such as direct instruction (e.g., Lingo, Slaton, & Jolivet, 2006; White, 1988) and functional assessment (e.g., Carr et al., 1999; Elliott, Witt, Kratochwill, & Stroiber, 2002; Lane, Umbreit, & Beebe-Frankenberger, 1999). Other strategies have been well-researched

and found to be ineffective, such as expulsion and suspension (e.g., Dishion, McCord, & Poulin, 1999; Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006). Still other strategies, such as simply yelling at students, may have received little or no research attention. It is important to consider a variety of strategies because teachers' *perceptions* of the effectiveness of a given strategy may differ from the strategy's effectiveness as determined by research. In particular, general education teachers are less likely than special education teachers to use well-researched and empirically validated strategies (Gagnon & Maccini, 2007; Maccini & Gagnon, 2006).

The current study is a preliminary investigation into teachers' perceptions of both the challenges involved in integrating children with behavioural problems and potential strategies that may be used to deal with those problems. To this end, we designed an instrument to measure teachers' perceptions. Therefore, the current study is divided into two separate but related phases: Phase One was the creation of the *Teachers' Perceptions of Successful Integration (TPSI)* survey; Phase Two was a pilot of the survey that provided some preliminary data concerning teachers' perceptions of the challenges and strategies involved with integrating students with behavioural problems. Because of the exploratory nature of the study, we did not make specific predictions.

Method

Phase One

Participants. Five teachers individually participated in semi-structured interviews. All participants were teachers from the same primary public school (K-6) located within a large district school board. The sample consisted of one male general education teacher, three female general education teachers, and one female special education teacher. Since the focus of this study was to determine general educators' perceptions of integrating students with behaviour disorders, more general educators were interviewed in order to verify relevant successes and challenges. One special education teacher was interviewed to identify issues held by a teacher with progressive attitudes towards integration, and to identify some successful strategies for integrating children with behaviour disorders into the general education setting. Each participant had a minimum of five years teaching experience to ensure that a wide breadth of experience was drawn upon. All of the teachers indicated that they had previously educated at least one student with a behaviour disorder in their classroom.

Interview Questions. Semi-structured interviews were used to determine teacher's perceptions of the unique challenges that children with behaviour disorders create in the general education classroom and the strategies that teachers employ to foster successful integration. A semi-structured interview technique was used to ensure that the topics raised by the teacher could be explored, while at the same time maintaining a focused conversation. The interview questions were generated on the basis of issues raised in the literature concerning the integration of exceptional children in the general setting and tailored to include students with behaviour disorders. The interview was designed to assess teachers' general opinions towards the concept of integrating students with behaviour disorders in the general education setting, the factors that affected teachers' willingness to integrate, the specific challenges that students with behaviour disorders bring into the general educational setting, and the strategies that teachers use to address these challenges. Sample interview questions included "How do you feel towards the concept of integrating children with special needs into the general education setting?" and "What are some successful strategies for integrating children with behaviour disorders into the general education setting?"¹

Interview Procedure. Participants were contacted by telephone and asked to participate. Interviews occurred within the school at a time that was convenient for the teachers. All contacted teachers agreed to participate in the interview process. Each interview lasted approximately 30 minutes and was audio-recorded to allow for a naturally flowing conversation. The interviews were then transcribed and subjected to content analysis. To ensure reliability, two independent raters analyzed the transcripts for relevant themes. Themes identified by both raters were combined to form a survey that assessed teachers' perceptions of the challenges of and strategies for integrating students with behaviour disorders into the general educational setting. The resulting survey, *Teachers' Perceptions of Successful Integration (TPSI)*, was administered during Phase Two of this study and is discussed in more detail below.

Phase Two

Participants. The *TPSI* was completed by 53 teachers (14 males = 26.4%; 38 females = 71.1%). Of these, 51 (96.2%) indicated having previously taught

1 The complete list of questions used in the semi-structured interview phase is available on request from the authors.

a student with a behaviour disorder; only 2 teachers (3.8%) had never taught a student with a behaviour disorder. Teachers in our sample had taught an average of 14.5 years ($SD = 10.2$ years). All teachers reported having taught both general and special education, although the term *special education* was not precisely defined. Teachers averaged 13.3 years ($SD = 9.9$ years) teaching regular education and 6.6 years ($SD = 6.7$ years) teaching special education. About 26.9% of teachers were currently teaching K to Grade 5 and 73.1% of teachers were currently teaching Grades 6 to 8.

Procedure. Two hundred copies of the survey package were distributed to Principals within a large district school board, which was distinct from the school board that participated in Phase One. Principals then distributed the packages to the teachers in their respective schools. Fifty-three completed surveys (response rate: 26.5%) were returned in a sealed, unmarked envelope provided by the researcher. The survey package consisted of the *TPSI* and an information sheet/feedback letter.

Instrument. The *Teachers' Perceptions of Successful Integration (TPSI)* survey was designed to investigate teachers' perceptions of integrating students with behaviour disorders into the regular education setting, with particular attention to perceived challenges and integration techniques. The *TPSI* survey consisted of three sections. Section A is composed of demographic questions, including gender, general teaching experience, experience teaching special education, experience teaching general education, current grade level taught, and previous grade levels taught. Section B asked teachers to rate the effectiveness of 61 integration strategies (e.g., ensuring students sit at desks while lessons are being taught). Perceptions were reported using a 5-point Likert scale, where 1= *Very Ineffective*, 2= *Somewhat Ineffective*, 3= *Neither Effective Nor Ineffective*, 4= *Somewhat Effective*, 5= *Very Effective*. Participants also had the option of selecting a *Not Applicable/ Have Not Used* response, which was treated as missing data during the analyses. In the results section, effectiveness ratings were reported only if the teacher had used the relevant strategy. Finally, section C asked participants to indicate how demanding they perceived the challenges of integrating students with behaviour disorders to be. Responses to the 25 items were made on a 5-point Likert scale, where 1= *Very Undemanding*, 2= *Somewhat Undemanding*, 3= *Neither Demanding nor Undemanding*, 4= *Somewhat Demanding*, 5= *Very Demanding*. Participants had the option of selecting a *Not Applicable/ Have Not Encountered* response, which was again treated as missing data during the analyses; ratings of demandingness are presented only for those teachers who had encountered the challenge.

Results

Results were grouped into the following categories: (a) perceptions of the challenges of integration, (b) perceptions of the strategies for integration, and (c) perceptions of the challenges and strategies of integration as a function of teachers' demographic variables.

Challenges to Integration

Table 1 presents the challenges of integrating students with behaviour disorders into the regular education setting, the percentage of teachers encountering the challenge, the valid percentage of teachers reporting the challenge as either somewhat demanding or very demanding, and the mean score on each item (1 = *Very Undemanding*, 5 = *Very Demanding*). If teachers selected *Not Applicable/Have Not Encountered*, their responses were not included in the mean calculations. It must be noted, however, that the majority of the presented challenges, when encountered, were considered to be somewhat or very demanding by teachers; no challenges were considered to be undemanding – perhaps all of these challenges are so pronounced as to be inherently demanding. For example, 49.1% of teachers had encountered the challenge of “bringing a weapon to school”, with all of them reporting such incidents as somewhat or very demanding.

Strategies for Integration

Table 2 presents the strategies used by teachers when integrating students with behaviour disorders into the regular education setting, the percentage of teachers who reported using the strategy, the valid percentage of teachers reporting the strategy as either somewhat effective or very effective, and the mean score on each item (1 = *Very Ineffective*, 5 = *Very Effective*). Responses indicating that the participant had not used the presented strategy were treated as missing data. Some strategies were considered to be ineffective by the respondents, as indicated by the low frequency of effective nominations.

Perceptions of Challenges and Strategies as a Function of Teachers' Demographic Variables

Using a series of independent samples *t* tests, the demand of the challenges was examined with respect to experience teaching special education,

Table 1
Perceived Challenges by Percentage of Teachers Encountering the Challenge, Percentage of Teachers Reporting Challenge as Somewhat or Very Demanding, and Mean Demandingness Ratings

Challenge	Encountered	Somewhat Demanding	Very Demanding	Mean (SD)
Requires constant attention	100.0	18.9	81.1	4.81 (.40)
Disruption in the classroom	100.0	30.2	69.8	4.70 (.46)
Requires immediate attention	100.0	39.6	52.8	4.45 (.64)
Delays the lesson	100.0	43.4	56.6	4.57 (.50)
Acts out during lag-time in my lesson	98.1	30.8	59.6	4.50 (.67)
Displays rule breaking behaviour(s)	98.1	50.0	44.2	4.38 (.60)
Difficulties following routines	98.1	53.8	44.2	4.42 (.54)
Manifests negative behaviour(s) when frustrated	98.1	55.8	36.5	4.29 (.61)
Requires extra instructional time	98.1	61.5	30.8	4.23 (.58)
Difficulties following (unmodified) curriculum	98.1	65.4	30.8	4.27 (.53)
Displays bullying behaviour	96.2	25.5	74.5	4.75 (.44)
Displays disorderly conduct	96.2	43.1	51.0	4.45 (.61)
Exhibits anti-social behaviour	96.2	45.1	49.0	4.43 (.61)
Must be taught at a lower level compared to others	96.2	47.1	11.8	3.71 (.67)
Uncontrollable Behaviour	94.3	2.0	98.0	4.98 (.14)
Threatens other students	94.3	12.0	84.0	4.80 (.49)
Acts out against other students in the class	94.3	20.0	80.0	4.80 (.40)
Child teaches negative behaviour to others in class	94.3	40.0	58.0	4.56 (.54)
Child is victimized by bullies	94.3	52.0	46.0	4.44 (.54)
Fights physically with other students	92.5	18.4	81.6	4.82 (.39)
Acts out during unsupervised play	84.9	34.0	47.2	4.51 (.59)
Injuries to other students in the classroom	81.1	9.3	90.7	4.91 (.29)
Practices truancy	79.2	40.5	33.3	4.07 (.77)
Engages in substance abuse	52.8	21.4	71.4	4.64 (.62)
Brings weapons to school	49.1	3.8	96.2	4.96 (.20)

Table 2
Strategies for Integrating Students with Behaviour Disorders by Percentage of Teachers Using the Strategy, Teacher Ratings of Effectiveness, and Mean Effectiveness Ratings

Strategy	Used Strategy	Some-what Effective	Very Effective	Mean (SD)
Using clear and consistent rules	98.1	7.7	90.4	4.88 (.38)
Clear expectations that are known to the child	98.1	19.2	78.8	4.77 (.47)
Communication between staff members	98.1	26.9	65.4	4.52 (.80)
Giving the student tasks s/he can succeed at	98.1	28.8	69.2	4.67 (.51)
Modifying the curriculum	98.1	51.9	34.6	4.21 (.67)
Building a relationship of trust between student and teacher	96.2	7.8	90.2	4.88 (.38)
Creating positive classroom atmospheres	96.2	11.8	82.4	4.76 (.55)
Ensuring that students do not speak during lessons	94.3	28.0	24.0	3.54 (1.18)
Structured classroom	94.3	32.0	66.0	4.64 (.53)
Teaching to different learning styles	94.3	44.4	48.0	4.40 (.64)
Priority seating	94.3	46.0	46.0	4.34 (.75)
Frequent rewards for doing good work	94.3	50.0	42.0	4.30 (.76)
Giving responsibility to children with behaviour disorders	94.3	52.0	38.0	4.28 (.64)
Modifying teacher expectations	94.3	54.0	40.0	4.34 (.59)
Ensuring that students stay on task	92.5	26.5	55.1	4.35 (.83)
Parental involvement in school life	92.5	26.5	67.3	4.61 (.61)
Peer support	92.5	40.8	44.9	4.24 (.85)
Co-operative learning groups	92.5	42.9	24.5	3.76 (1.07)
Strict classroom routine	92.5	53.1	28.6	4.00 (.91)
Ensuring students sit at desks while lessons are being taught	90.6	20.8	27.1	3.56 (1.11)
Suspension from school	90.6	39.6	0	2.96 (1.07)
Staff briefing sessions on the nature of behaviour disorders	90.6	52.1	41.7	4.31 (.75)
Reduction in privileges	90.6	58.3	16.7	3.83 (.81)

Table 2 (continued)
Strategies for Integrating Students with Behaviour Disorders by Percentage of Teachers Using the Strategy, Teacher Ratings of Effectiveness, and Mean Effectiveness Ratings

Strategy	Used Strategy	Some-what Effective	Very Effective	Mean (SD)
Student flow between special education & "regular" classroom	90.6	60.4	18.8	3.88 (.84)
Yelling/raising your voice	88.7	10.6	2.1	2.04 (1.14)
Behavioural contracts	88.7	53.2	19.1	3.81 (.88)
Time out areas (teacher governed)	88.7	68.1	17.0	4.00 (.63)
Teaching interpersonal problem solving skills	88.7	70.2	14.9	3.98 (.61)
Detention	86.8	39.1	6.5	3.26 (.95)
Time out area (student governed)	86.8	58.7	26.1	4.09 (.69)
Asking the students in the class to help integrate the child	86.8	65.2	15.2	3.91 (.69)
Activity based learning	84.9	42.2	33.3	4.07 (.81)
Creating consistent rules between the sending and receiving classrooms	83.0	29.5	70.5	4.70 (.46)
Creating positive environments between sending & receiving classrooms	83.0	31.8	56.8	4.45 (.70)
Drug therapy	83.0	50.0	20.5	3.86 (.80)
Structured methods of instruction	83.0	50.0	40.9	4.32 (.64)
Point-systems	81.1	39.5	23.3	3.67 (1.08)
Positive reinforcement treatments	81.1	53.5	37.2	4.26 (.69)
Peer-mentoring programs	79.2	42.9	26.2	3.71 (1.17)
Peer tutoring	77.4	53.7	24.4	3.95 (.86)
Teaching moral reasoning	77.4	65.9	4.9	3.63 (.77)
Increasing on-task behaviour during lessons	75.5	42.5	32.5	3.98 (1.00)
Anger management classes	75.5	45.0	30.0	3.98 (.89)
Having student be an active participant in the intervention program	75.5	45.0	42.5	4.20 (.94)
Co-operative teaching strategies	73.6	41.0	38.5	4.18 (.76)
Cognitive-behavioural modifications	73.6	74.4	10.3	3.95 (.51)

Table 2 (continued)
Strategies for Integrating Students with Behaviour Disorders by Percentage of Teachers Using the Strategy, Teacher Ratings of Effectiveness, and Mean Effectiveness Ratings

Strategy	Used Strategy	Some-what Effective	Very Effective	Mean (SD)
Social skills training	71.7	65.8	21.1	4.08 (.59)
Cascading from special education to regular education setting	69.8	40.5	10.8	3.50 (.93)
Behavioural modification programs	69.8	51.4	27.0	3.97 (.87)
Point-systems including punishment	62.3	54.5	12.1	3.67 (.90)
Teaching perspective taking	52.8	57.1	7.1	3.61 (.79)
Expulsion from school	43.4	8.7	0	2.21 (1.04)
Self-control treatments	43.4	69.6	4.3	3.74 (.62)
Segregated classrooms	41.5	40.9	4.5	3.23 (1.02)
Parent training in management skills	41.5	50.0	40.5	4.32 (.65)
Self-reinforcement treatments	41.5	59.1	18.2	3.95 (.65)
Family therapy	32.1	41.2	35.3	4.12 (.78)
Play therapy	32.1	52.9	17.6	3.88 (.70)
Reducing exposure to fluorescent lights	26.4	28.6	0	3.14 (.77)
Aggression replacement training	24.5	61.5	15.4	3.92 (.64)
Psychodynamic therapy	18.9	50.0	0	3.5 (.53)

gender, and current grade level taught. Grade level was collapsed and compared between two groups; teachers of Grades K-5 (elementary school) and those of Grades 6-8 (middle/junior high school). No statistically significant results emerged when examining the demographic variable of grade level currently taught. Having special education teaching experience and gender influenced perceptions of certain challenges. For example, teachers without special education experience compared to those with experience perceived disruptive classroom behaviour as more demanding. With respect to gender, female teachers more than their male counterparts perceived manifesting negative behaviours as being more demanding. Significant differences in perceptions of the challenges as a function of gender and special education teaching experience are presented in Table 3.

Table 3
Perceptions of the Demandingness of the Challenges as a Function of Special Education Teaching Experience and Gender

Challenge	<u>Demographic Variable</u>		<i>t(df)</i>
	Special Education Experience Yes (<i>n</i> = 22)	No (<i>n</i> = 31)	
Disruption in the Classroom	<i>M</i> = 4.55 <i>SD</i> = .51	<i>M</i> = 4.81 <i>SD</i> = .40	2.08(51)*
Requires Extra Attention	<i>M</i> = 4.68 <i>SD</i> = .48	<i>M</i> = 4.90 <i>SD</i> = .3	2.07(51)*
Acts Out During Lag Time	<i>M</i> = 4.19 <i>SD</i> = .81	<i>M</i> = 4.71 <i>SD</i> = .46	2.93(50)*
Displays Rule Breaking Behaviour	<i>M</i> = 4.18 <i>SD</i> = .66	<i>M</i> = 4.53 <i>SD</i> = .51	2.16(50)*

	<u>Gender</u>		
	Male (<i>n</i> = 14)	Female (<i>n</i> = 38)	
Difficulties Following Routines	<i>M</i> = 4.14 <i>SD</i> = .54	<i>M</i> = 4.54 <i>SD</i> = .51	-2.47(49)*
Requires More Instructional Time	<i>M</i> = 3.86 <i>SD</i> = .77	<i>M</i> = 4.32 <i>SD</i> = .53	-2.47(49)*
Manifests Negative Behaviours	<i>M</i> = 3.86 <i>SD</i> = .77	<i>M</i> = 4.43 <i>SD</i> = .55	-2.96(49)*
Requires Immediate Attention	<i>M</i> = 4.0 <i>SD</i> = .78	<i>M</i> = 4.55 <i>SD</i> = .69	-2.48(50)*
Requires Instruction at a Lower Level	<i>M</i> = 3.14 <i>SD</i> = .86	<i>M</i> = 3.75 <i>SD</i> = .91	-2.15(48)*
Acts Out During Unsupervised Play	<i>M</i> = 4.15 <i>SD</i> = .90	<i>M</i> = 4.61 <i>SD</i> = .50	-2.18(42)*

* $p < .05$.

Responses concerning teachers' perceptions of the effectiveness of the presented strategies were also analyzed with respect to experience teaching special education, gender, and grade level currently taught using a series of independent samples *t* tests. Grade level was again collapsed into two groups: Grades K-5 and Grades 6-8. The three demographic variables all influenced

the perceived effectiveness of certain strategies. Statistically significant results are presented in Table 4. It should be cautioned, however, that a large number of comparisons were made for this analysis and only a small number of those comparisons produced results significant at the $p < .05$ level.

Discussion

The current study featured the development of a survey to measure teachers' perceptions of integrating students with behaviour disorders into the regular classroom. This survey was developed both from the existing literature about integration and from semi-structured interviews with teachers who had some experience dealing with students who have behaviour disorders. Preliminary data from the current study suggest that, although more refined and more specific research is required before strong claims can be made about teachers' perceptions, some interesting avenues for this research can be defined. In particular, we have some initial impressions of the kinds of problems teachers reported encountering and how they viewed the severity of those problems, which strategies they reported using and how effectively they viewed those strategies, and which demographic variables predicted teachers' perceptions.

A majority of the teachers we surveyed reported encountering each of the problems listed in the survey, with the exception of "brings weapons to school", which was encountered by 49% of the teachers. All teachers reported encountering students who were disruptive in the classroom, required extra attention, delayed the lessons, or required immediate attention. Other commonly encountered challenges included difficulty following routines, difficulty following the unmodified curriculum, and requiring extra instructional time. Each of these problems was also found to be *somewhat* or *very demanding* by more than 90% of the teachers who encountered them. We would suggest that each of these challenges tend to create organizational and instructional challenges for the teacher.

Other commonly reported problems would seem to create more behaviour management challenges for the teachers. For example, students who displayed uncontrollable behaviour; acted out against other students; displayed disorderly conduct or rule-breaking; exhibited anti-social or bullying behaviour; threatened, injured, or fought physically with other students; or were victimized by bullies. More than 90% of teachers who had encountered these problems found them to be *somewhat* or *very demanding*. Less commonly, teachers reported students bringing weapons to school; this was seen as *very demanding* by 96% of teachers who encountered it, and *somewhat demanding* by the other 4%.

Table 4
Perceptions of the Effectiveness of the Strategies as a Function of Experience Teaching Special Education, Gender, and Grade Level Taught

Strategy	<u>Demographic Variable</u>		<i>t</i> (df)
	Special Education Experience Yes (<i>n</i> = 22)	No (<i>n</i> = 31)	
Parental Involvement in School Life	<i>M</i> = 4.86 <i>SD</i> = .35	<i>M</i> = 4.41 <i>SD</i> = .69	2.80(47)*
Using Clear Expectations Known to child	<i>M</i> = 4.95 <i>SD</i> = .56	<i>M</i> = 4.63 <i>SD</i> = .56	-2.57(50)*
Giving the Child Responsibility	<i>M</i> = 4.63 <i>SD</i> = .60	<i>M</i> = 4.07 <i>SD</i> = .59	-2.95(48)*
Teaching to Different Learning Styles	<i>M</i> = 4.64 <i>SD</i> = .58	<i>M</i> = 4.21 <i>SD</i> = .63	-2.43(48)*
Point Systems	<i>M</i> = 3.30 <i>SD</i> = 1.13	<i>M</i> = 4.0 <i>SD</i> = .95	2.21(41)*
Gender			
	Male (<i>n</i> = 14)	Female (<i>n</i> = 38)	
Communication Between Staff	<i>M</i> = 4.07 <i>SD</i> = 1.0	<i>M</i> = 4.68 <i>SD</i> = .67	2.50(49)*
Anger Management Classes	<i>M</i> = 3.45 <i>SD</i> = 1.13	<i>M</i> = 4.18 <i>SD</i> = .72	-2.39(37)*
Yelling/Raising Voice	<i>M</i> = 2.64 <i>SD</i> = 1.28	<i>M</i> = 1.79 <i>SD</i> = .99	2.48(45)*
Activity based Learning	<i>M</i> = 4.50 <i>SD</i> = .67	<i>M</i> = 3.91 <i>SD</i> = .82	2.24(42)*
Grade Level Taught			
	K-5 (<i>n</i> = 14)	6-8 (<i>n</i> = 38)	
Point Systems	<i>M</i> = 4.15 <i>SD</i> = .56	<i>M</i> = 3.47 <i>SD</i> = 1.01	2.19(40)*
Use of Behavioural Contracts	<i>M</i> = 4.33 <i>SD</i> = .49	<i>M</i> = 3.65 <i>SD</i> = .92	2.46(44)*
Cognitive-Behaviour Modification Techniques	<i>M</i> = 4.33 <i>SD</i> = .50	<i>M</i> = 3.86 <i>SD</i> = .44	2.72(36)*
Peer Tutoring	<i>M</i> = 4.50 <i>SD</i> = .52	<i>M</i> = 3.71 <i>SD</i> = .90	2.82(38)*
Modifying Teacher Expectations	<i>M</i> = 4.64 <i>SD</i> = .50	<i>M</i> = 4.23 <i>SD</i> = .60	2.29(47)*

* $p < .05$.

A few challenges, including teaching negative behaviour to others, engaging in substance abuse, practicing truancy, and acting out during unsupervised play, are more difficult to categorize, but were encountered by most of the teachers in our sample and were reported as *somewhat* or *very demanding* by the majority of teachers who encountered them. In fact, the only challenge that was commonly not reported as demanding was the need to be taught at a lower level than other students. Our findings concerning the challenges perceived by teachers are consistent with Avramidis and Norwich's (2002) findings that teachers tended to view dangerous, uncontrollable behaviour and time-demanding behaviour as more challenging than other special needs. This may explain why teachers prefer not to integrate students with behavioural disorders (Soodak et al., 1998). This may not be surprising since teachers are trained to *teach*; they may have much less preparation for dealing with behavioural problems that interfere with the teaching process than for those that demand more teaching. Dealing with behavioural problems, then, may require specific strategies that have little to do with providing appropriate instruction. Nevertheless, classroom management may not be separable from effective teaching.

Most teachers in our sample were familiar with most of the strategies presented in the survey. In fact, there were only 10 strategies that less than half the teachers reported not using. These included psychodynamic therapy (the least familiar strategy), reduced exposure to fluorescent lights, aggression replacement training, play therapy, family therapy, self-control treatments, self-reinforcement treatments, parent training in management skills, expulsion from school, and segregated classrooms. We would suggest that teachers are unfamiliar with these strategies because they are beyond the teachers' control (e.g., teachers may advocate not using fluorescent lights, but the decision to not use it is generally administrative), require specialized therapeutic skills, or are no longer politically desirable because of possible detrimental effects (e.g., expulsion, suspension, and segregation; Dishion, et al., 1999; Hemphill et al., 2006). Furthermore, these strategies (with the exception of fluorescent lights) tend to involve removing the student from the classroom, which is the teachers' primary domain.

Of the less familiar strategies, therapeutic alternatives (with the exception of psychodynamic therapy) tended to be viewed as *somewhat* or *very effective* by teachers who reported using them. This may suggest that teachers familiar with these strategies see the problem as located outside the classroom setting or best dealt with outside the classroom setting. Alternatively, these teachers may see other professionals, such as qualified therapists, as better equipped to deal with behaviour problems than themselves. Other less familiar

strategies, such as segregated classrooms and expulsion from school, were perceived as ineffective by the teachers who used them. It can be argued that these solutions do not really deal with behaviour problems in the classroom at all, but simply get rid of the problem. Further, segregated classrooms may not be politically popular because the current trend in education is toward inclusion; even if teachers viewed this strategy as effective, they may be unlikely to say so on a survey. Finally, fluorescent lighting tended not to be viewed as effective by the teachers who had encountered it.

More familiar strategies (encountered by 50% to 79% of teachers) could be roughly divided into three groups: (a) therapeutic approaches, (b) cooperative approaches, and (c) advanced cognitive skills training. Therapeutic approaches in this group included behaviour modification, cognitive behavioural modification, point systems, anger-management training, and social skills training. These more familiar therapeutic approaches (especially the behavioural approaches) may be more transferable to a classroom setting than the less familiar therapeutic approaches. For example, teachers can play an active role in establishing a point-system, or in encouraging or discouraging particular behaviours. Therefore, these strategies may be more common in classrooms than, for example, family therapy (difficult to accomplish in class). Cooperative approaches tended to involve collaboration between students and teacher to solve problems; these approaches included peer mentoring and tutoring, including the student as an active participant in the intervention, and cooperative teaching. Advanced cognitive skills training took the form of teaching perspective taking or moral reasoning. These strategies may be seen as an extension of normal teaching skills and may be readily accessible to many teachers. Many teachers were also familiar with the more organizational strategies of increasing on-task behaviour in the classroom and cascading from special education to regular classrooms.

All of these more familiar strategies (with the exception of cascading) were rated as *somewhat* or *very effective* by at least two-thirds of the teachers surveyed with little apparent difference in ratings of effectiveness by type of strategy. Interestingly, most of these strategies tended to involve both the teacher and the students in an active manner to reduce behavioural problems. However, some of the strategies, such as teaching moral reasoning, teaching perspective taking, and increasing on-task behaviour, were more imposed on students by teachers. We can speculate that teaching moral reasoning and perspective-taking constitute an extension of the teachers' skill set; that is, they are still *teaching*; it may not be surprising that teachers commonly encounter strategies that involve a skill set they already have or that they have favourable attitudes toward such strategies. Behaviourally oriented strategies may be per-

ceived favourably because they can be directly implemented by teachers and may be seen to affect students' behaviour directly in the classroom. Finally, co-operative strategies may be used to convert a potentially adversarial relationship into a partnership that benefits everyone involved.

Some more familiar strategies (used by 80% to 90% of teachers we surveyed) included behaviourally-based interventions such as behavioural contracts, time out areas (governed by either teacher or students), activity-based learning, creating a positive learning environment, and the use of point systems. These strategies were rated as *somewhat* or *very effective* by more than 70% of teachers who used them. Other popular strategies included teaching interpersonal problem-solving skills and structured methods of instruction (both of which can be seen as extensions of basic teaching), creating consistent rules and positive environment between sending and receiving classrooms (more applicable to mainstreaming than integration per se), and asking students to help integrate the child (a co-operative approach). Again, teachers tended to rate these strategies as effective. About 83% of teachers indicated that they had used drug therapy and, of these, 70% reported the strategy as *somewhat* or *very effective*. Many teachers also reported using yelling and detention, but fewer than half of those who had used these strategies found them to be effective.

The remaining 24 strategies on the survey had been encountered by more than 90% of the teachers in our sample. This, in itself, suggests that teachers were familiar with a large number of strategies for dealing with behavioural problems in the classroom. Again, several types of strategies were included in this group. Perhaps not surprisingly, many of the most frequently encountered strategies directly involved classroom interaction and the relationship between students and teacher. For example, practically all teachers were familiar with the use of clear and consistent rules, communicating clear expectations, giving students realistic tasks, modifying the curriculum, building a relationship of trust with students, creating a positive atmosphere, using a structured classroom, teaching to different learning styles, using priority seating, rewarding good work, giving responsibility to students, ensuring that students stay on task, and student flow between the regular and special education classrooms. Also not surprising is that the majority of teachers (80% or more) tended to rate each of the strategies as *somewhat* or *very effective* in dealing with behaviour disorders. These findings suggest that teachers may be both most familiar with and most comfortable with strategies that are firmly rooted in the teachers' primary domain: the classroom.

Several other very popular strategies may be characterized as official or non-official teacher training. Teachers in our sample tended, for example,

to cite communication between staff members (possibly creating the opportunity to share experiences), peer support, and staff briefing sessions as both familiar and effective strategies. This suggests that teachers are motivated to learn about behaviour disorders, particularly from their peers, and perceive this knowledge as making them more effective teachers. Other familiar strategies that were perceived to be effective included modifying teacher expectations, which tended to be perceived as effective, parental involvement in school life (suggesting the willingness of teachers to collaborate), and reducing students' privileges.

Overall, teachers in our sample were more likely to report using or encountering strategies that they perceived as more effective. However, there were some interesting discrepancies. Perhaps most notably, 89% of teachers reported yelling or raising their voices at students, while only 12% perceived this strategy as *somewhat* or *very effective*. It is possible that yelling at students was considered a last resort by many teachers, or simply a result of frustration (yelling may not be an effective strategy, but may reduce tension for the teacher). Perhaps more likely, this finding may point out an inherent limitation in our survey: Teachers were asked only if they had used the strategy; they were not asked to rate frequency. As a result, almost all teachers may have reported having yelled at students *at least once*, rather than reporting that they used this strategy on a regular basis. Perhaps they rated this strategy as ineffective precisely because they had used it and found it not to be effective. Frequency of strategy use is an important variable that should be considered in future research. Further, inexperienced teachers may frequently use strategies such as yelling, while experienced teachers may have found this strategy to be ineffective. Again, teacher experience is an important variable for future research.

Our findings regarding teacher characteristics and perceptions also provide interesting avenues for future research. Although Avramidis and Norwich (2002) suggest that teacher characteristics are not important predictors of attitudes toward integration, our findings suggest that teacher characteristics may play a role in determining how *particular* challenges are perceived. For example, and perhaps not surprisingly, teachers with special education training reported classroom disruption, extra attention, acting out during lag time, and rule-breaking as less challenging than did teachers without special education experience. And female teachers reported several challenges as more demanding than did their male counterparts; these included difficulty following routine, requiring more instructional time, manifesting negative behaviours, requiring immediate attention, requiring lower-level instruction, and acting out during unsupervised play. An examination of how and why these characteristics may affect teachers' perceptions is beyond the scope of the current study,

and these findings are perhaps best interpreted as interesting avenues for future research.

Similarly, our findings suggest that demographic variables, specifically special education experience, gender, and grade level taught (elementary or middle/junior high school), affected teachers' perceptions of a few strategies (each demographic affected different strategies). However, demographic variables were not found to affect the vast majority of strategies. These data, then, should be interpreted with due caution as preliminary exploratory findings. Given the large number of comparisons we made in this analysis, there is a likelihood of Type 1 errors. However, future examination of how teacher characteristics may affect perceptions of the effectiveness of specific strategies may provide more conclusive and interesting results.

Overall, the current project has provided some initial validity for the *TPSI* because most teachers in our sample were familiar with both the challenges and strategies we presented. However, further research (currently underway) using a larger database and statistical methods are required to more firmly establish the construct validity of the scale. Further, internal reliability is difficult to establish at this point because we suspect the scale divides into several independent factors. Again, research is underway to determine how specific challenges and strategies may form independent factors. Identifying independent factors should allow the refinement of the scale and produce a shorter, more reliable, more comprehensible, and more valid tool for the investigation of teachers' attitudes toward integration.

Further, this preliminary study has suggested many avenues for future research. Interesting research questions include whether strategies that teachers perceived as effective have actually been shown to be effective, whether teachers consistently use strategies they perceive as effective, and how much trial and error is involved in teachers' perceptions (e.g., are strategies perceived as ineffective when they have been used consistently to little result?). A more in-depth examination of demographic variables and teachers' perceptions is warranted, particularly with more detailed information about teacher characteristics. And the *TPSI* can be adapted to the study of specific behaviour disorders, such as ADHD, conduct disorder, and autism. As a result, we believe that the current study has led to the development of an interesting and useful tool for many future investigations into teachers' perceptions of successful integration strategies.

References

- Astor, R. A., (1998). Moral reasoning about school violence: Informational assumptions about harm within school subcontexts. *Educational Psychologist*, 33, 207-221.
- Angelides, P., Stylianou, T., & Gibbs, P. (2006). Preparing teachers for inclusive education in Cyprus. *Teaching and Teacher Education*, 22, 513-522.
- Avramidis, E. & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17, 129-147.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bauwens, J., Hourcade, J. J., & Friend, M. (1989). Cooperative teaching: A model for general and special education integration. *Remedial and Special Education*, 10, 17-22.
- Bennett, S., Dworet, D., & Daigle, R. (2001). Educational provisions for exceptional students in the province of Ontario. *Exceptionality Education Canada*, 11, 99-121.
- Block, M.E., & Zeman, R. (1996). Including students with disabilities in regular physical education: Effects on nondisabled children. *Adapted Physical Activity Quarterly*, 13, 38-49.
- Bradshaw, K. (2001). The integration of children with behaviour disorders: An Australian perspective. In J. Visser, H. Daniels, & T. Cole (Eds.), *International perspectives on inclusive education (vol. 1): Emotional and behavioural difficulties in mainstream schools* (pp. 165-182). New York, NY: Elsevier Science Ltd.
- Bullock, L. M., Zagar, E. L., Donahue, C. A., & Pelton, G. B. (1985). Teachers' perceptions of behaviourally disordered students in a variety of settings. *Exceptional Children*, 52, 123-130.
- Carr, E.G., Horner, R.H., Turnbull, A., Marquis, J., Magito-McLaughlin, D., McAtee, M., et al. (1999). *Positive behaviour support as an approach for dealing with problem behaviour in people with developmental disabilities: A research synthesis*. AAMR Monograph.
- Clough, P., & Lindsay, G. (1991). *Integration and the support service*. Slough: NFER.

- Coleman, M. C. (1996). *Emotional and behavioural disorders: Theory and practice* (3rd ed.). Toronto, ON: Allyn & Bacon.
- Conner, M. (1994). Emotional and behavioural disorders: Classification and provision. *Therapeutic Care and Education*, 3, 4-18.
- Coots, J.J., Bishop, K.D., & Grenot-Scheyer, M. (1998). Supporting elementary age students with significant disabilities in general education classrooms: Personal perspectives on inclusion. *Education and Training in Mental Retardation and Developmental Disabilities*, 33, 317-330.
- Dishion, T.J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behaviour. *American Psychologist*, 54, 755-764.
- Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., & Price, J. M. (2003). Peer rejection and social information-processing factors in the development of aggressive behaviour problems in children. *Child Development*, 74, 374-393.
- Dyson, L. L., & Zhang, N. (2004). Concerns about the integration of elementary school children with disabilities: A comparison of Canadian and Chinese teachers. *Exceptionality Education Canada*, 14, 141-167.
- Elliot, S. N., Witt, J. C., Kratochwill, T. R., & Stroiber, K. C. (2002). Selecting and evaluating classroom interventions. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behaviour problems II: Preventative and remedial approaches* (pp. 243-294). Bethesda, MD: National Association of School Psychologists.
- Esperat, M. C., Moss, P. J., Roberts, K. A., Kerr, L., & Green, A. E. (1999). Special needs children in the public schools: Perceptions of school nurses and school teachers. *Issues in Comprehensive Pediatric Nursing*, 22, 167-182.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fisher, J.D., & Fisher, W.A. (2002). The information-motivation-behavioral skills model. In R. J. DiClemente, R. A. Crosby, & M. C. Keglar (Eds.), *Emerging theories in health promotion practice and research: Strategies for improving public health* (pp. 40-70). San Francisco, CA: Jossey-Bass.
- Gagnon, J. C., & Maccini, P. (2007). Teacher-reported use of empirically validated and standards-based instructional approaches in secondary mathematics. *Remedial and Special Education*, 28, 43-56.

- Hemphill, S. A., Toumbourou, J. W., Herrenkohl, T. I., McMorris, B. J., & Catalano, R. F. (2006). The effect of school suspensions and arrests on subsequent adolescent antisocial behaviour in Australia and the United States. *Journal of Adolescent Health, 39*, 736-744.
- Jordan, A., & Stanovich, P. (2004). The beliefs and practices of Canadian teachers about including students with special needs in their regular elementary classrooms. *Exceptionality Education Canada, 14*, 25-46.
- Kavale, K. A. (2002). Mainstreaming to full inclusion: From orthogenesis to pathogenesis of an idea. *International Journal of Disability, Development and Education, 49*, 210-214.
- Kavale, K. A., Forness, S. R., & Bender, M. (1988). *Handbook of learning disabilities: Methods and interventions* (Vol. 2). Toronto, ON: College-Hill Publications.
- Koutrouba, K., Varmvakari, M., & Steliou, M. (2006). Factors correlated with teachers' attitudes toward the inclusion of students with special educational needs in Cyprus. *European Journal of Special Needs Education, 21*, 381-394.
- Lane, K. L., Umbreit, J., & Beebe-Frankenberger, M. E. (1999). Functional assessment research on students with or at risk for EBD: 1990 to present. *Journal of Positive Behavior Interventions, 1*, 101-111.
- Lingo, S. A., Slaton, D. B., & Jolivette, K. (2006). Effects of corrective reading on the reading abilities and classroom behaviours of middle school students with reading deficits and challenging behavior. *Behavioral Disorders, 31*, 265-283.
- Maccini, P., & Gagnon, J. C. (2006). Mathematics instructional practices and assessment accommodations by secondary special and general educators. *Exceptional Children, 72*, 217-234.
- Marschark, M., Young, A., & Lukomski, J. (2002). Perspectives on inclusion. *Journal of Deaf Studies and Deaf Education, 7*, 187-188.
- Moberg, S. (2003). Education for all in the North and the South: Teachers' attitudes towards inclusive education in Finland and Zambia. *Education and Training in Developmental Disabilities, 38*, 417-428.
- Ogden, T. (2001). The prevention and management of behaviour difficulties in school research and practice. In J. Visser, H. Daniels, & T. Cole (Eds.), *International Perspectives on Inclusive Education, Volume 1: Emotional*

and Behavioural Difficulties in Mainstream Schools (pp. 75-89). Oxford, UK: Elsevier Science Ltd.

- Opdal, L. R., Wormnæs, S., & Habayeb, A. (2001). Teachers' opinions about inclusion: A pilot study in a Palestinian context. *International Journal of Disability, Development and Education*, 48, 143-162.
- Pearman, E. L., Barnhart, M. W., Huang, A. M., & Mellblom, C. (1992). Educating all students in school: Attitudes and beliefs about inclusion. *Education and Training in Mental Retardation*, 27, 176-182.
- Praisner, C. L. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Exceptional Children*, 69, 135-45.
- Roberts, C. M. & Lindsell, J. S. (1997). Children's attitudes and behavioural intentions towards peers with disabilities. *International Journal of Disability, Development and Education*, 44, 133-145.
- Rosenberg, M. S., Wilson, R., Maheady, L., & Sindelar, P. T. (1997). *Educating students with behaviour disorders* (2nd ed.). Toronto, ON: Allyn & Bacon.
- Soodak, L. C., Podell, D. M., & Lehman, L. R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *The Journal of Special Education*, 31, 480-497.
- Soto, G., Müller, E., Hunt, P., & Goetz, L. (2001). Critical issues in the inclusion of students who use augmentative and alternative communication: An education team perspective. *Augmentative and Alternative Communication*, 17, 62-72.
- Steele, M. M. (2007). Teaching social studies to high school students with learning problems. *The Social Studies*, 98, 59-64.
- Weisel, A., & Dror, O. (2006). School climate, sense of efficacy and Israeli teachers' attitudes toward inclusion of students with special needs. *Education, Citizenship, and Social Justice*, 1, 157-174.
- White, W. A. (1988). A meta-analysis of the effects of direct instruction in special education. *Education and Treatment of Children*, 11, 364-374.
- Williams, A. (2003). *Teachers' perceptions of the challenges and strategies of integrating students with behaviour disorders*. Unpublished undergraduate thesis, University of Waterloo.
- Wilson, B. A. (1999). Inclusion: Empirical guidelines and unanswered questions. *Education and Training in Mental Retardation and Developmental Disabilities*, 34, 119-133.

Winter, E. C. (2006). Preparing new teachers for inclusive schools and classrooms. *Support for Learning*, 21, 85-91.

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